

In the Claims:

1 1. [currently amended] A method of mobile device control comprising:
2 moving a surrogate under wireless control by a user;
3 during the moving, detecting unsuitable degradation of wireless
4 communications of the wireless control; and
5 in response to the detecting and while the surrogate is still receiving the
6 wireless communications, autonomously moving the surrogate to provide suitable
7 wireless communications of the wireless control;
8 wherein the detecting comprises comparing a performance parameter
9 associated with the wireless communications with a threshold.

1 2. [original] The method as claimed in claim 1 additionally comprising:
2 autonomously moving the surrogate along a previously determined route.

1 3. [previously presented] The method as claimed in claim 1 wherein:
2 autonomously moving the surrogate to provide suitable wireless
3 communications of the wireless control occurs after passage of a period of time
4 following the detecting of the degradation; and
5 the method further comprises after the detecting of the unsuitable
6 degradation, the surrogate loitering near a location where the unsuitable degradation
7 was detected during the passage of the period of time.

1 4-5. [canceled].

1 6. [previously presented] The method as claimed in claim 1 wherein:
2 autonomously moving the surrogate uses logged information of forward
3 movement using at least one of dead reckoning, odometry, directional
4 measurement, differential wheel rotation, or a combination thereof; and
5 autonomously moving the surrogate uses waypoints back along a forward
6 movement path for backtracking movement.

1 7. [currently amended] A method of mobile telepresencing comprising:
2 moving a surrogate under real-time wireless control by a user;
3 autonomously moving the surrogate to an area with adequate wireless
4 coverage to regain wireless control when the wireless control is lost for a period of
5 time; ~~and~~
6 while the surrogate is autonomously moving, activating a human perceptible
7 indicator which is perceptible to humans in the presence of the surrogate; and
8 prior to autonomously moving the surrogate, determining that the loss of the
9 wireless control has persisted for the period of time.

1 8. [canceled].

1 9. [currently amended] The method as claimed in claim 7 wherein:
2 losing wireless control includes degradation of the control to a threshold
3 level;
4 autonomously moving the surrogate to regain wireless control occurs after
5 [[a]] the period of time.

1 10. [previously presented] The method as claimed in claim 7 wherein:
2 autonomously moving the surrogate includes:
3 backtracking while measuring distance and avoiding collisions by the
4 surrogate;
5 stopping the surrogate for an obstacle; and
6 resuming backtracking after removal of the obstacle.

1 11. [canceled].

1 12. [currently amended] The method as claimed in claim 7 wherein:
2 the autonomously moving the surrogate ~~to backtrack~~ uses logged information
3 of forward movement using at least one of dead reckoning, odometry, directional
4 measurement, differential wheel rotation, or a combination thereof;
5 the autonomously moving the surrogate ~~to backtrack~~ uses a slower speed
6 than forward speed; and

7 the autonomously moving the surrogate uses waypoints back along a
8 forward movement path for backtracking movement considering the slower speed
9 of backtracking.

1 13. [currently amended] A mobile device control system comprising:
2 a surrogate movable under wireless control by a user; and
3 a computer/transceiver system on the surrogate for moving the surrogate to
4 regain wireless control independently of the wireless control after passage of a non-
5 zero amount of time following a loss of the wireless control;
6 wherein the computer/transceiver system is configured to move the
7 surrogate after the computer/transceiver system has determined that the loss has
8 persisted for the non-zero amount of time.

1 14. [canceled].

1 15. [currently amended] The system as claimed in claim 13 wherein:
2 the computer/transceiver system is configured to autonomously move ~~for~~
3 ~~autonomously moving~~ the surrogate to regain wireless control ~~occurs~~ after the
4 surrogate remains stationary for the non-zero amount of time.

1 16. [original] The system as claimed in claim 13 wherein:
2 the computer/transceiver system for autonomously moving the surrogate
3 includes measuring distance and avoiding collisions by the surrogate.

1 17. [canceled].

1 18. [previously presented] The system as claimed in claim 13 wherein:
2 the computer/transceiver system uses logged information of forward
3 movement using at least one of dead reckoning, odometry, directional
4 measurement, differential wheel rotation, or a combination thereof; and
5 the computer/transceiver system calculates waypoints back along a forward
6 movement path for backtracking movement.

1 19. [currently amended] A mobile telepresencing system comprising:

2 a surrogate movable under wireless control by a user; and

3 a computer/transceiver system configured to determine ~~for determining~~ when
4 the wireless control is lost and responsive to the determining, autonomously move
5 ~~moving~~ the surrogate to an area not currently receiving adequate coverage of the
6 wireless control, but in which the surrogate previously experienced adequate
7 coverage of the wireless control, and wait in the area until ~~to regain~~ adequate
8 coverage of the wireless control is regained.

1 20. [currently amended] The system as claimed in claim 19 wherein
2 ~~additionally comprising~~:

3 the computer/transceiver system is configured to ~~for~~ autonomously ~~moving~~
4 move the surrogate along at least one of a previously determined route, a distance,
5 a destination, a direction, or a combination thereof.

1 21. [currently amended] The system as claimed in claim 19 wherein:

2 the computer/transceiver system is configured to determine ~~for~~
3 ~~determining~~ degradation of the wireless control to a threshold level; and

4 the computer/transceiver system ~~for autonomously moving~~ is
5 configured to autonomously move the surrogate to regain wireless control ~~occurs~~
6 after a period of time.

1 22. [currently amended] The system as claimed in claim 19 wherein:

2 the computer/transceiver system ~~for autonomously moving the surrogate~~
3 includes:

4 backtracking means for measuring distance and avoiding collisions by
5 the surrogate during backtracking;

6 stopping means for stopping the surrogate for an obstacle; and

7 means for resuming backtracking after removal of the obstacle.

1 23. [canceled].

1 24. [previously presented] The system as claimed in claim 19 wherein:

2 the computer/transceiver system uses logged information of forward
3 movement using at least one of dead reckoning, odometry, directional
4 measurement, differential wheel rotation, or a combination thereof for backtracking;

5 the computer/transceiver system provides a slower speed than forward
6 speed for backtracking by the surrogate; and

7 the computer/transceiver system uses waypoints back along a forward
8 movement path for backtracking movement considering the slower speed of
9 backtracking.

1 25. [canceled]

1 26. [currently amended] The method as claimed in claim 1 ~~claim 25~~
2 wherein:

3 the detecting comprises determining that a current non-zero data rate at
4 which the surrogate is successfully transmitting data via the wireless
5 communications is less than a desired data rate.

1 27. [currently amended] The method as claimed in claim 26 further
2 comprising:

3 prior to the detecting, wirelessly transmitting a video signal at or above the
4 desired data rate from the surrogate to the user.

1 28. [currently amended] The method as claimed in claim 10 further
2 comprising:

3 prior to the resuming of the backtracking, the surrogate sensing removal of
4 the obstacle; and

5 wherein the resuming is responsive to the sensing.

1 29. [currently amended] The method as claimed in claim 1 ~~claim 25~~
2 wherein the detecting comprises determining that a current transmission delay
3 associated with packets received by the surrogate is greater than an acceptable
4 transmission delay.

1 30. [currently amended] The system of claim 13 wherein the
2 computer/transceiver system is configured to detect the loss of the wireless control
3 and to configure the surrogate to remain stationary ~~near the location~~ for the non-
4 zero amount of time following the loss of the wireless control near a location at
5 which the loss of the wireless control was detected.

1 31. [previously presented] The method of claim 7 wherein the surrogate
2 comprises the human perceptible indicator.

1 32. [currently amended] The system of claim 13 wherein the
2 computer/transceiver system is configured to detect the loss of the wireless control,
3 to configure the surrogate to loiter for the non-zero amount of time following the
4 loss of the wireless control near a location at which the loss of the wireless control
5 was detected, and to monitor for return of the wireless control during the non-zero
6 amount of time.

1 33. [previously presented] The system of claim 19 wherein the
2 computer/transceiver system is configured to loiter in the area for the wireless
3 control to return.

1 34. [previously presented] The method of claim 10 wherein the resuming
2 backtracking comprises automatically without user intervention resuming
3 backtracking.

1 35. [previously presented] The system of claim 22 wherein the means for
2 resuming backtracking after removal of the obstacle comprises means for
3 automatically without user intervention resuming backtracking after removal of the
4 obstacle.

1 36. [new] The method of claim 7 wherein the period of time is at least
2 two seconds.

1 37. [new] The system of claim 13 wherein the computer/transceiver
2 system is configured to determine that a first non-zero data rate at which the
3 surrogate is successfully transmitting data via the wireless control at a first moment
4 in time is less than a desired data rate and as a result of the determining, move the
5 surrogate so that the surrogate transmits data via the wireless control at a second
6 non-zero data rate that is greater than or equal to the desired data rate at a second
7 moment in time after the first moment in time.